DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Preliminary Amendment

2. Preliminary amendment filed on 3/11/05 has been entered.

Information Disclosure Statement

3. The information disclosure statement (IDS) submitted on 3/11/05, the information disclosure statement is being considered by the examiner.

Drawings

4. The Examiner has approved drawings filed on 3/11/05.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim(s) 1- 6, are rejected under 35 U.S.C. 101 as not falling within one of the four statutory categories of invention. While the claims recite a series of steps or acts to be performed, a statutory "process" under 35 U.S.C. 101 must (1) be tied to another statutory category (such as a particular apparatus), or (2) transform underlying subject matter (such as an article or material) to a different state or thing (Reference the May 15, 2008 memorandum issued by Deputy Commissioner for Patent Examining Policy, John J. Love, titled "Clarification of 'Processes' under 35 U.S.C. 101"). The instant

claims neither transform underlying subject matter nor positively tie to another statutory category that accomplishes the claimed method steps, and therefore do not qualify as a statutory process.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless --
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1- 10, are rejected under 35 U.S.C. 102(b) as being anticipated by Yuji Nojiri et al., " HDTV Standards Converter", NHK Laboratories Note, NHK Technical Research Laboratories. Tokyo, JP, No. 427, 1 August 1994, pages 1-12, XP000483397. ISSN: 0027-657X. page 7, line 4 - page 8, line 27.

As to claim 7, Yuji Nojiri et al., disclose a motion –compensated standards converter for HDTV has been developed with special attention to motion vector estimation and motion vector wherein Video processing apparatus for forming an output picture at a selected temporal location from a sequence of input pictures having associated motion vectors (abstract, introduction paragraph), the apparatus comprising:

a temporal picture projector for projecting input pictures to the temporal location of the output picture using the motion vectors associated respectively with said input pictures, to form projected pictures (note, fig 2, the preprocessor as shown the function of the preprocessor is to perform deinterlacing and spatial low pass filtering for motion

vector estimation. During standard interlacing standard signals are converted into signals using a continuous fields for motion vector estimation, the system uses method based on a gradient method, it also performs motion vector between adjacents fields, paragraph 3.2) ;

a counter for counting the number of motion vectors from the input pictures pointing towards each pixel of the respective projected picture for each of the input pictures (note, the input data is used as a basis for calculating the estimates of motion vectors. Counting of motion vectors is implied and used as a base for interpolation and estimation of motion vectors. Although this is not mentioned directly it is the large data analytical step, see fig 1 and fig 4, see paragraph 3.3); and

a fast mixer for mixing the projected pictures, adapted to mix the pixels of projected pictures in varying proportions, such that at each pixel in the mix the relative proportion from each candidate picture is dependent on the number of motion vectors from the respective input picture pointing towards the spatial location of that pixel (fig 5, paragraph 3.4, paragraph 3.5 and also paragraph 4.1 field rate conversion, (field interpolation).

As to claim 8, Yuji Nojiri discloses apparatus according to Claim 7, including a processor receiving from the counter, for each input picture, a signal representing the number of motion vectors pointing towards each pixel location, and processing this signal to produce, for each projected picture, a smoothed prediction of quality signal which is passed to the first mixer to control the mixing of candidate pictures(note, the input data is used as a basis for calculating the estimates of motion vectors. Counting of

motion vectors is implied and used as a base for interpolation and estimation of motion vectors. Although this is not mentioned directly it is the large data analytical step, see fig 1 and fig 4, see paragraph 3.3).

As to claim 9, Yuji Nojiri discloses apparatus according to Claim 8, further comprising a second mixer which receives as its inputs the output of the Fist mixer and a selected one of the input pictures, adapted to mix its inputs in varying proportions according to an overall prediction of quality signal derived from the prediction of quality signals for each candidate picture (paragraph 4.1 , 4.2 and paragraph 5).

As to claim 10, Yuji Nojiri discloses apparatus according to Claim 9, wherein the selected one of the input pictures is the picture temporally closest to the temporal location of the output picture (paragraph 4.1 , 4.2 and paragraph 5).

As to claim 1- 6 are method claims corresponding to apparatus claims 7- 10 and therefore, they are similarly analyzed and are rejected.

Other prior art cited

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Fogg (US. 6,466,624 B1) discloses video decoder with bit stream based enhancements.

Contact Information

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sheela C Chawan whose telephone number is. 571-272-7446. The examiner can normally be reached on Monday - Thursday 7.30 - 6.00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen Lillis can be reached on 571-272-6928. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

10/13/08

/Sheela C Chawan/

Primary Examiner, Art Unit 2624